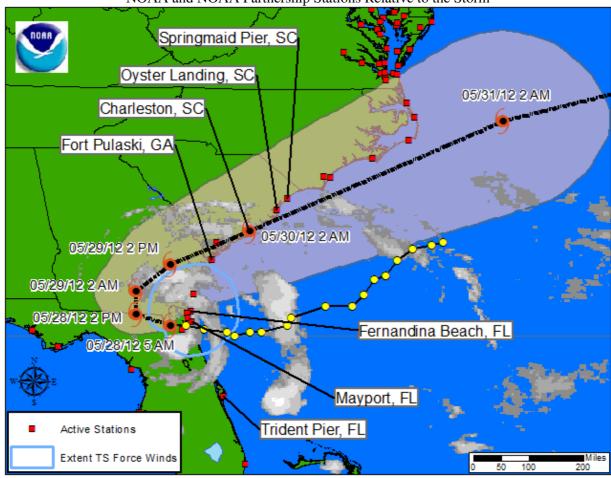


NOAA and NOAA Partnership Stations Relative to the Storm



### Storm Analysis

As of 05/28/2012 06:00 EDT, water levels from South Carolina to central Florida are elevated. Water levels from Trident Pier, FL north to Fort Pulaski, GA are measuring between 0.8 and 2.5 feet above tidal predictions. Water levels along the South Carolina coast from Charleston to Springmaid Pier range between 0.6 and 1.2 feet above tidal predictions. Winds are between 12 and 22 knots with gusts up to 40 kts. Barometric pressure continues to gradually fall at many locations but has started to rise at Mayport, FL and Fernandina Beach, FL.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to <u>Mean Lower Low Water</u> are:

Mayport (Bar Pilots Dock), FL: Next predicted high tides are 4.4 ft (1.34 m) at 05/28/2012 14:43 EDT and 4.5 ft (1.39 m) at 05/29/2012 02:58 EDT.

Fernandina Beach, FL: Next predicted high tides are 5.7 ft (1.74 m) at 05/28/2012 14:58 EDT and 5.9 ft (1.82 m) at 05/29/2012 03:14 EDT.

Fort Pulaski, GA: Next predicted high tides are 6.6 ft (2.00 m) at 05/28/2012 14:20 EDT and 7.0 ft (2.15 m) at 05/29/2012 02:35 EDT.

Charleston, SC: Next predicted high tides are 4.9 ft (1.51 m) at 05/28/2012 14:05 EDT and 5.3 ft (1.64 m) at 05/29/2012 02:12 EDT.

Oyster Landing (N. Inlet Estuary), SC: Next predicted high tides are 4.4 ft (1.35 m) at 05/28/2012 14:54 EDT and 4.6 ft (1.43 m) at 05/29/2012 03:09 EDT.

Springmaid Pier, SC: Next predicted high tides are 4.8 ft (1.45 m) at 05/28/2012 13:49 EDT and 5.0 ft (1.54 m) at 05/29/2012 01:54 EDT.

Trident Pier, FL: Next predicted high tides are 3.1 ft (0.95 m) at 05/28/2012 14:02 EDT and 3.3 ft (1.03 m) at 05/29/2012 02:14 EDT.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see <u>Tidal Datums</u>. For more information or archived products and reports, please see the <u>Storm QuickLook Homepage</u>.

Analyst:DW ------

### SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM BERYL ADVISORY NUMBER 10 NWS NATIONAL HURRICANE CENTER MIAMI FL AL022012 500 AM EDT MON MAY 28 2012

...BERYL GRADUALLY WEAKENING AS IT MOVES INLAND...WILL CONTINUE TO PRODUCE HEAVY RAINS EVEN AS THE WINDS DECREASE...

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY...

THE TROPICAL STORM WARNING HAS BEEN DISCONTINUED NORTH OF THE SAVANNAH RIVER.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A TROPICAL STORM WARNING IS IN EFFECT FOR...
\* FLAGLER BEACH FLORIDA TO THE SAVANNAH RIVER GEORGIA

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE.

### **DISCUSSION AND 48-HOUR OUTLOOK**

\_\_\_\_\_

AT 500 AM EDT...0900 UTC...THE CENTER OF TROPICAL STORM BERYL WAS LOCATED BY NATIONAL WEATHER SERVICE DOPPLER RADAR AND SURFACE OBSERVATIONS NEAR LATITUDE 30.3 NORTH...LONGITUDE 82.0 WEST. BERYL IS MOVING TOWARD THE WEST NEAR 8 MPH. A TURN TOWARD THE WEST-NORTHWEST AND THEN TOWARD THE NORTH WITH A DECREASE IN FORWARD SPEED IS EXPECTED TODAY...FOLLOWED BY A TURN TOWARD THE NORTHEAST ON TUESDAY. ON THE FORECAST TRACK...THE CENTER OF BERYL WILL CONTINUE MOVING INLAND OVER NORTHEAST FLORIDA TODAY AND MOVE INTO SOUTHEAST GEORGIA TONIGHT AND TUESDAY.

MAXIMUM SUSTAINED WINDS HAVE DECREASED TO NEAR 50 MPH WITH HIGHER GUSTS. GRADUAL WEAKENING IS EXPECTED TO CONTINUETODAY...AND BERYL IS FORECAST TO BECOME A TROPICAL DEPRESSION TONIGHT.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 140 MILES MAINLY TO THE NORTH AND EAST OF THE CENTER. THE JACKSONVILLE NAVAL AIR STATION RECENTLY REPORTED A SUSTAINED WIND OF 33 MPH AND A WIND GUST OF 41 MPH. A WIND GUST OF 44 MPH WAS RECENTLY REPORTED AT NAVAL STATION MAYPORT.

THE ESTIMATED MINIMUM CENTRAL PRESSURE BASED ON SURFACE OBSERVATIONS IS 997 MB...29.44 INCHES.

### HAZARDS AFFECTING LAND

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WIND...TROPICAL STORM CONDITIONS WILL CONTINUE ALONG THE COAST WITHIN THE WARNING AREA TODAY...AND WILL ALSO SPREAD INLAND NEAR THE CENTER OF BERYL. TROPICAL STORM FORCE WIND GUSTS ARE POSSIBLE ELSEWHERE OVER NORTHEASTERN FLORIDA AND SOUTHEASTERN GEORGIA TODAY...PARTICULARLY IN RAINBANDS.

STORM SURGE...THE COMBINATION OF A STORM SURGE AND THE TIDE WILL CAUSE NORMALLY DRY AREAS NEAR THE COAST TO BE FLOODED BY RISING WATERS. THE WATER COULD REACH THE FOLLOWING DEPTHS ABOVE GROUND IF THE PEAK SURGE OCCURS AT THE TIME OF HIGH TIDE...GEORGIA AND NORTHEASTERN FLORIDA...2 TO 4 FT

THE DEEPEST WATER WILL OCCUR ALONG THE IMMEDIATE COAST NEAR AND TO THE NORTH OF THE LANDFALL LOCATION...WHERE THE SURGE WILL BE ACCOMPANIED BY LARGE WAVES. SURGE-RELATED FLOODING DEPENDS ON THE RELATIVE TIMING OF THE SURGE AND THE TIDAL CYCLE...AND CAN VARY GREATLY OVER SHORT DISTANCES. FOR INFORMATION SPECIFIC TO YOUR AREA...PLEASE SEE PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE.

SURF...DANGEROUS SURF CONDITIONS...INCLUDING RIP CURRENTS...ARE EXPECTED ALONG THE COAST FROM NORTHEASTERN FLORIDA TO NORTH CAROLINA OVER THE REMAINDER OF THE MEMORIAL DAY WEEKEND. PLEASE SEE STATEMENTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE FOR INFORMATION SPECIFIC TO YOUR AREA.

RAINFALL...BERYL IS EXPECTED TO PRODUCE TOTAL RAIN ACCUMULATIONS OF 4 TO 8

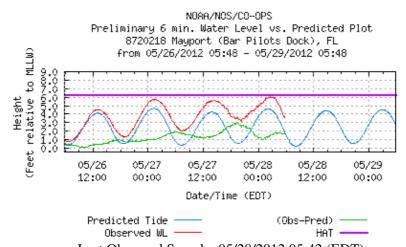
INCHES...WITH ISOLATED MAXIMUM AMOUNTS OF 12 INCHES...FROM NORTHERN FLORIDA THROUGH SOUTHEASTERN NORTH CAROLINA.

### FORECASTER BRENNAN/ROBERTS

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Mayport (Bar Pilots Dock) - Water Level, Mayport (Bar Pilots Dock) - Winds, Mayport (Bar Pilots Dock) - Barometric, Mayport (Bar Pilots Dock) - Air/Water Temp, Fernandina Beach - Water Level, Fernandina Beach - Winds, Fernandina Beach - Barometric, Fort Pulaski - Water Level, Fort Pulaski - Winds, Fort Pulaski - Barometric, Charleston - Water Level, Charleston - Winds, Charleston - Barometric, Oyster Landing (N. Inlet Estuary) - Water Level, Springmaid Pier - Water Level, Springmaid Pier - Winds, Springmaid Pier - Barometric, Trident Pier - Water Level, Trident Pier - Winds, Trident Pier - Barometric,

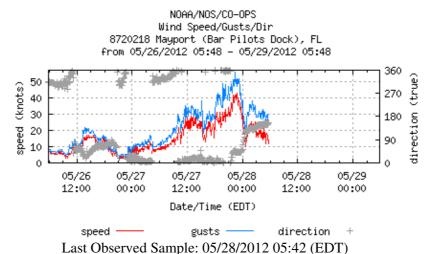
### Mayport (Bar Pilots Dock), FL - Return to List



Last Observed Sample: 05/28/2012 05:42 (EDT)
Relative to MLLW: Observed: 3.55 ft. Predicted: 1.82 ft. Residual: 1.73 ft.

Historical Maximum Water Level: Sep 27 2004, 2.47 ft. above MHHW

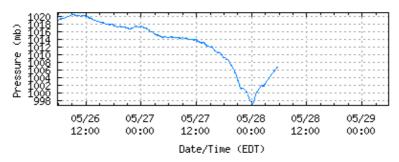
# Mayport (Bar Pilots Dock), FL - Return to List



Wind Speed: 14 knots Gusts: 26 knots Direction: 156° T

# Mayport (Bar Pilots Dock), FL - Return to List

NOAA/NOS/CO-OPS
Barometric Pressure Plot
8720218 Mayport (Bar Pilots Dock), FL
from 05/26/2012 05:48 - 05/29/2012 05:48

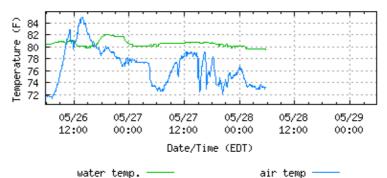


barometric pressure —— Last Observed Sample: 05/28/2012 05:42 (EDT)

Barometric Pressure: 1006.9 mb

### Mayport (Bar Pilots Dock), FL - Return to List

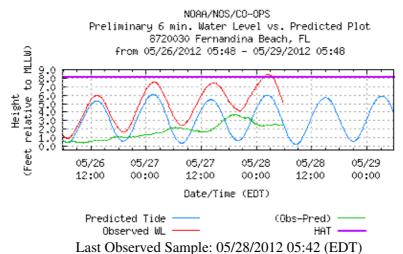
NOAA/NOS/CO-OPS Air/Water Temperature Plot 8720218 Mayport (Bar Pilots Dock), FL from 05/26/2012 05:48 - 05/29/2012 05:48



Last Observed Sample: 05/28/2012 05:42 (EDT)

Water Temperature: 79.5° F Air Temperature: 73.2° F

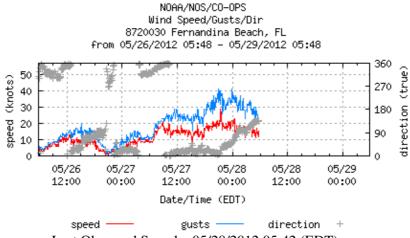
### Fernandina Beach, FL - Return to List



Relative to MLLW: Observed: 5.18 ft. Predicted: 2.73 ft. Residual: 2.45 ft.

Historical Maximum Water Level: Oct 2 1898, 6.94 ft. above MHHW

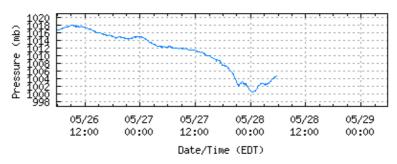
### Fernandina Beach, FL - Return to List



Last Observed Sample: 05/28/2012 05:42 (EDT) Wind Speed: 15 knots Gusts: 23 knots Direction: 134° T

### Fernandina Beach, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8720030 Fernandina Beach, FL from 05/26/2012 05:48 - 05/29/2012 05:48



barometric pressure —— Last Observed Sample: 05/28/2012 05:42 (EDT)

Barometric Pressure: 1004.9 mb

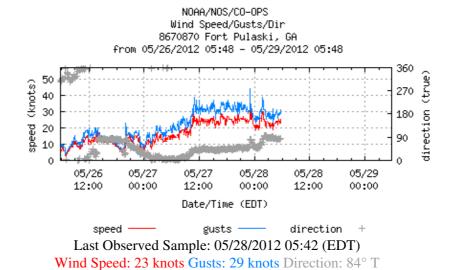
### Fort Pulaski, GA - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8670870 Fort Pulaski, GA (Feet relative to MLLW) from 05/26/2012 05:48 - 05/29/2012 05:48 8.0 6.0 4.0 2.0 0.0 05/26 05/27 05/27 05/28 05/28 05/29 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) Predicted Tide (Obs-Pred)

Observed WL — HAT — HAT — Last Observed Sample: 05/28/2012 05:42 (EDT)

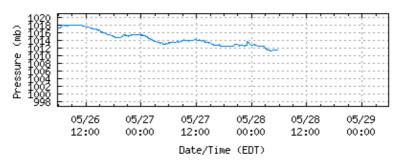
Relative to MLLW: Observed: 4.84 ft. Predicted: 2.50 ft. Residual: 2.34 ft. Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above MHHW

# Fort Pulaski, GA - Return to List



### Fort Pulaski, GA - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8670870 Fort Pulaski, GA from 05/26/2012 05:48 - 05/29/2012 05:48

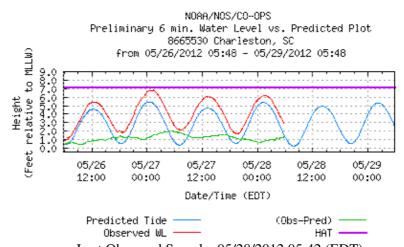


barometric pressure ———

Last Observed Sample: 05/28/2012 05:42 (EDT)

Barometric Pressure: 1011.5 mb

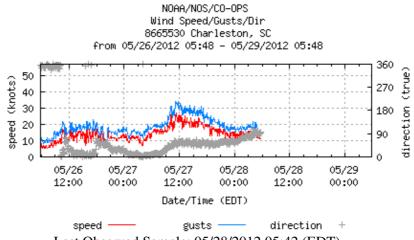
# Charleston, SC - Return to List



Last Observed Sample: 05/28/2012 05:42 (EDT)
Relative to MLLW: Observed: 2.90 ft. Predicted: 1.60 ft. Residual: 1.30 ft.

Historical Maximum Water Level: Sep 21 1989, 6.76 ft. above MHHW

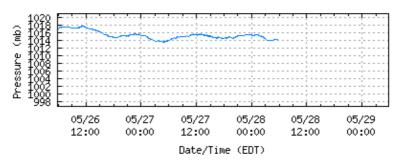
### Charleston, SC - Return to List



Last Observed Sample: 05/28/2012 05:42 (EDT) Wind Speed: 11 knots Gusts: 15 knots Direction: 94° T

# Charleston, SC - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8665530 Charleston, SC from 05/26/2012 05:48 - 05/29/2012 05:48



barometric pressure —— Last Observed Sample: 05/28/2012 05:42 (EDT)

Barometric Pressure: 1014.3 mb

# Oyster Landing (N. Inlet Estuary), SC - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8662245 Oyster Landing (N. Inlet Estuary), SC (Feet relative to MLLW) from 05/26/2012 05:48 - 05/29/2012 05:48 9876543210 Height 05/26 05/27 05/27 05/28 05/28 05/29 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) Predicted Tide (Obs-Pred)

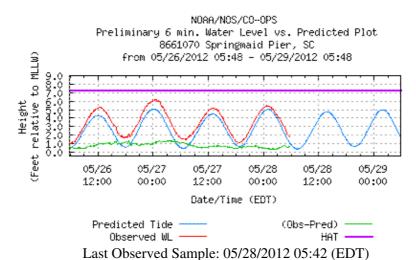
Last Observed Sample: 05/28/2012 05:48 (EDT)

HAT

Observed WL

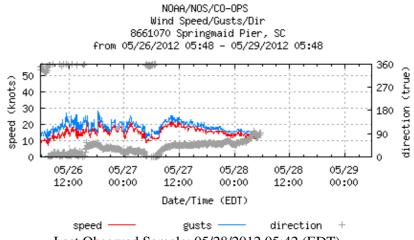
Relative to MLLW: Observed: 3.12 ft. Predicted: 2.04 ft. Residual: 1.08 ft. Historical Maximum Water Level: Aug 26 2011, 2.4 ft. above MHHW

### Springmaid Pier, SC - Return to List



Relative to MLLW: Observed: 1.76 ft. Predicted: 1.05 ft. Residual: 0.71 ft. Historical Maximum Water Level: Jan 1 1987, 3.65 ft. above MHHW

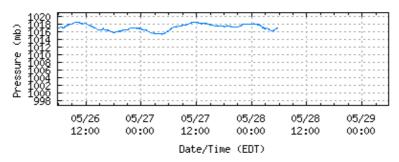
### Springmaid Pier, SC - Return to List



Last Observed Sample: 05/28/2012 05:42 (EDT) Wind Speed: 12 knots Gusts: 14 knots Direction: 91° T

# Springmaid Pier, SC - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8661070 Springmaid Pier, SC from 05/26/2012 05:48 - 05/29/2012 05:48



barometric pressure ——

Last Observed Sample: 05/28/2012 05:42 (EDT)

Barometric Pressure: 1017.1 mb

### Trident Pier, FL - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8721604 Trident Pier, FL (Feet relative to MLLW) from 05/26/2012 05:48 - 05/29/2012 05:48 9876543210 Height 05/26 05/27 05/27 05/28 05/28 05/29 12:00 00:00 12:00 12:00 00:00 00:00 Date/Time (EDT)

Last Observed Sample: 05/28/2012 05:42 (EDT)

(Obs-Pred)

HAT

Predicted Tide

Observed WL

Relative to MLLW: Observed: 2.22 ft. Predicted: 0.95 ft. Residual: 1.27 ft. Historical Maximum Water Level: Sep 26 2004, 4.01 ft. above MHHW

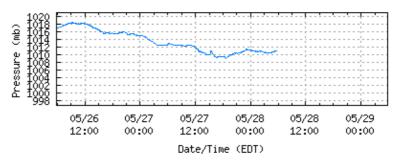
# Trident Pier, FL - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8721604 Trident Pier, FL from 05/26/2012 05:48 - 05/29/2012 05:48 360 50 speed (knots) 270 40 30 direction 180 20 10 05/27 05/28 05/29 05/26 05/27 05/28 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) speed gusts direction

Last Observed Sample: 05/28/2012 05:42 (EDT) Wind Speed: 12 knots Gusts: 17 knots Direction: 190° T

### Trident Pier, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8721604 Trident Pier, FL from 05/26/2012 05:48 - 05/29/2012 05:48



barometric pressure —— Last Observed Sample: 05/28/2012 05:42 (EDT)

Barometric Pressure: 1011.1 mb

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce